

a1 that changes a state of photo-induced birefringence rotates a polarization angle of the portion substantially acting optically as a half-wave plate.

SUB B37 DKE2
Q2 11. (Amended) An optical recording medium comprising:
at least one optical recording layer including an optical recording material that changes a state of photo-induced birefringence in response to a recording light that is controlled to rotate a polarization angle of the recording light, a portion of the recording layer that changes a state of photo-induced birefringence rotates a polarization angle of the portion substantially acting optically as a quarter-wave plate; and

an optical reflection layer formed on one surface of said optical recording layer.

SUB B4 21. (Amended) An optical recording medium comprising an optical recording layer that includes a material in which an azimuth of birefringence that is induced by a recording light controlled to rotate a polarization angle of the recording light changes in response to a rotation of the [a] polarization angle of said recording light.

Q3 22. (Amended) An optical recording method comprising:
controlling a polarization angle of a recording light emitted from a light source, the recording light controlled to rotate the polarization angle of the recording light;
illumination an optical recording medium with said recording light; and
forming an optical element on the optical recording medium by the illumination, that acts substantially as a half-wave plate, having an azimuth corresponding to a [said] polarization angle on the [an] optical recording medium [by illumination said optical recording medium with said recording light].

SUB B57 D56 E
Q4 26. (Amended) An optical recording method comprising:

controlling a polarization angle of a recording light emitted from a light source, the recording light controlled to rotate the polarization angle of the recording light;
 illuminating an optical recording medium with said recording light; and
 forming an optical element on the optical recording medium by the illumination, that acts substantially as a quarter-wave plate, having an azimuth corresponding to a [said] polarization angle on the [an] optical recording medium [by illuminating said topical recording medium with said recording light].

30. (Amended) An optical recording apparatus comprising:
 a light source that generates recording light;
 a spatial optical modulator that controllably rotates [controls] a polarization angle of said recording light; and
 a focusing optical system that directs the recording light obtained through the spatial optical modulator to an optical recording medium.

35. (Amended) An optical recording medium comprising an optical recording layer including an optical recording material that stores multilevel information using a light induced birefringence that acts optically as a half-wave plate, an orientation of an azimuth of birefringence formed by a recording light representing the multilevel information, the recording light controlled to rotate a polarization angle of the recording light.

37. (Amended) An optical recording medium comprising an optical recording layer including an optical recording material that stores multilevel information using a light induced birefringence that acts optically as a quarter-wave plate, at orientation of an azimuth of birefringence induced by controllably rotating a polarization angle of a recording light representing the multilevel information.

SUB 387 39. (Amended) An optical recording medium comprising an optical recording layer in which an azimuth of birefringence induced by controllably rotating a polarization angle of a recording light is multilevel-modulated and recorded in response to a rotation of a polarization angle of said recording light.

40. (Amended) An optical reproducing method comprising:
radiating a reproducing light on an optical recording medium in which an azimuth of an optical element that acts substantially as a half wave plate is multilevel recorded in response to a polarization angle of a recording light that is controlled to rotate the polarization angle of the recording light; and
determining a polarization angle of the reproducing light transmitted by said optical element.

SUB 391 43. (Amended) An optical reproducing method comprising:
radiating reproducing light on an optical recording medium in which an azimuth of an optical element that acts substantially as quarter-wave plate is multilevel-recorded in response to a polarization angle of a recording light that is controlled to rotate the polarization angle of the recording light; and
determining a polarization angle reproducing light reflected from said optical element.

SUB 401 46. (Amended) An optical reproducing apparatus comprising:
a reproducing light optical system for transmitting reproducing light to an optical recording medium in which an azimuth of an optical element that acts substantially as a half-wave plate is multilevel recorded in response to a polarization angle of a recording light that is controlled to rotate the polarization angle of the recording light; and

~~an analyzing unit that detects a polarization angle of reproducing light
transmitted by said optical element.~~

~~49. (Amended) An optical reproducing apparatus comprising:
a reproducing light optical system for emitting reproducing light toward an
optical recording medium in which an azimuth of an optical element that acts substantially as
a quarter-wave plate is multilevel recorded in response to a polarization angle of a recording
light that is controlled to rotate the polarization angle of the recording light; and
an analyzing unit that detects a polarization angle of reproducing light
reflected by an optical reflection layer and transmitted by said optical element.~~

Claim 52, line 3, replace "control" with --rotates--.

~~53. (Amended) A method for optically recording and reproducing information,
comprising:
controlling a polarization angle of a recording light emitted from a light
source, the recording light controlled to rotate the polarization angle of the recording light;
illuminating an optical recording medium with said recording light;
forming an optical element on the optical recording medium by the
illumination having an azimuth corresponding to a [said] polarization angle on the [an]
optical recording medium [by illuminating said optical medium with said recording light];
radiating reproducing light on the optical recording medium; and
determining a polarization angle of reproducing light acted on by said optical
element.~~

54. (Amended) A device for optically recording and reproducing information,
comprising:

controlling means for controlling a polarization angle of a recording light emitted from a light source, the recording light controlled to rotate the polarization angle of the recording light; [:]

forming means for forming an optical element on an optical recording medium by the illumination having an azimuth corresponding to a [said] polarization angle on the [an] optical recording medium [by illuminating said optical recording medium with said recording light];

illumination means for radiating reproducing light on the optical recording medium; and

determining means for determining a polarization angle of reproducing light acted on by said optical element.

55. (Amended) An optical recording medium comprising an optical recording layer in which an optical element is formed by a recording light that is controlled to rotate a polarization angle of the recording light, the optical element having an azimuth of birefringence and acting on reproducing light to adjust a polarization angle of the reproducing light by an amount greater than a difference between a polarization angle of the recording light used to form the optical element and a polarization angle of the reproducing light before the reproducing light is acted on by the optical element.

REMARKS

Claims 1-55 are pending in this application. By this Amendment, independent claims 1, 11, 21, 22, 26, 30, 35, 37, 39, 40, 43, 46, 49 and 52-55 are amended for clarification purposes only. Reconsideration in view of the above amendments and following remarks is respectfully requested.